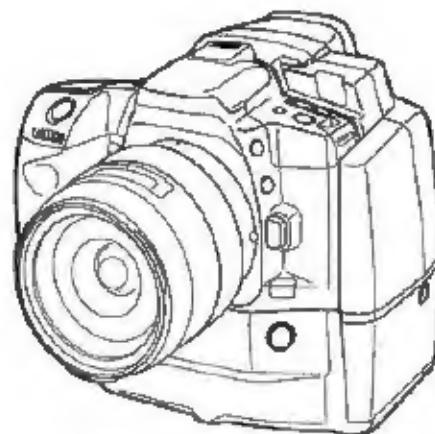




MINOLTA Digital Camera RD-175

Instruction Manual



Minolta GmbH, Business Equipment Operations, Minoltaring 11, D-30855 Langenhagen

IMPORTANT SAFETY INSTRUCTIONS

WHEN USING THIS DIGITAL CAMERA AND/OR ITS ACCESSORIES, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING:

- **READ AND UNDERSTAND ALL INSTRUCTIONS.**
- **SUPERVISE CLOSELY WHEN ANY DIGITAL CAMERA OR ACCESSORY IS USED BY OR NEAR CHILDREN. DO NOT LEAVE UNITS UNATTENDED WHILE IN USE, OR WITHIN THE REACH OF CHILDREN.**
- **DO NOT CONNECT POWER SOURCES OTHER THAN THOSE SPECIFIED IN THE MANUAL.**
- **DO NOT OPERATE DIGITAL CAMERA AND OR ACCESSORIES IF DROPPED, DAMAGED, OR WITH A DAMAGED CORD, UNTIL EXAMINED BY AN AUTHORIZED MINOLTA SERVICE FACILITY.**
- **TO AVOID ELECTRIC SHOCK, DO NOT IMMERSE FLASH AND/OR ACCESSORIES IN WATER OR OTHER LIQUIDS.**
- **TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT DISASSEMBLE DIGITAL CAMERA AND/OR ACCESSORIES. TAKE THEM TO AN AUTHORIZED MINOLTA SERVICE FACILITY WHENEVER SERVICE OR REPAIR IS REQUIRED. INCORRECT REASSEMBLY CAN CAUSE ELECTRIC SHOCK THE NEXT TIME THE UNIT IS USED.**

SAVE THESE INSTRUCTIONS

CAUTION

Danger of explosion if battery is incorrectly installed.

Replace only with the same, or equivalent type, battery recommended by Minolta.

Dispose of used batteries according to the instructions on the battery.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

Thank you for purchasing the Minolta RD-175 Digital Camera. Please take the time to read through this instruction manual, for it contains information that is important for the proper and safe use and care of your camera. Enjoy!

The Minolta RD-175 is a compact digital still video camera with the following features:

- The RD-175 digital camera uses three CCD Imaging arrays and a unique signal processing technique that allow it to photograph extremely high resolution images, up to 1.75 million pixels per image.
- The design of the RD-175 digital camera is based on the MAXUM 500si SUPER, and uses the same high performance autofocus and exposure systems. The RD-175 can also use lenses, flashes, and other accessories designed for use with MAXUM 500si SUPER.
- The RD-175 digital camera is equipped with a SCSI 2 interface, and can be connected directly to your Macintosh, IBM PC, or IBM PC compatible personal computer.
- The RD-175 digital camera is packaged with the RDGrabber utility software, and the Adobe Photoshop™ plug-in software that allow you to display your images on your personal computer.

This manual contains information regarding products introduced before September 1995. To obtain compatibility information for products released after this date, contact the nearest authorized Minolta Service Facility.

Adobe Photoshop™ is a registered trademark of Adobe Systems Inc.

Macintosh™ is a registered trademark of Apple Computer, Inc.

Other corporate names, and product names, are also registered trademarks.

FOR PROPER AND SAFE USE

STANDARD SYMBOLS

Various symbols are used throughout this instruction manual, and the product itself, for the proper and safe use of this product and to prevent personal injury, injury to others, and property damage. An explanation of the symbols follows. Read and understand each caution thoroughly before reading the main text of this instruction manual.

	Disregarding this warning may result in injury or death.
	Disregarding this caution may result in injury or property damage.

EXAMPLES



The outer triangle is for warning. The symbol inside illustrates what is being warned against. The example at left means beware of electric shock.



The circle with a diagonal slash is for prohibition (don't do). The symbol inside illustrates what act is prohibited. The example at left means do not disassemble.



The black circle indicates something you must do. The circle inside illustrates how it should be done. The example at left means you must hold the plug when removing it from the outlet.

SAFETY CAUTIONS FOR USE OF THE RD-175 DIGITAL CAMERA

- Read and understand all cautions and warnings thoroughly before using this product.

	Do not touch the flash tube during operation - it may become hot when the flash fires.
	Do not look directly at the sun through the lens or viewfinder.
	Do not subject the camera to direct sunlight. Fire may occur if the sunlight focuses at one point.

	Do not fire the flash near the eyes of people or animals, especially infants and young children. Maintain a distance of one meter (three feet) or greater.
	<ul style="list-style-type: none">• If the camera is dropped or subjected to an impact in which the interior is exposed, immediately remove the batteries and discontinue use.
	<ul style="list-style-type: none">• Do not disassemble. Call a Minolta Service Facility when repairs are required. Electric shock may occur if a high voltage circuit inside the camera is touched.
	Don't walk while looking through the lens or viewfinder, you may trip and fall causing injury.

SAFETY CAUTIONS CONT.

		Read and follow all warnings supplied with the batteries. Batteries may explode due to improper use.
		<ul style="list-style-type: none"> • Do not install batteries upside down (+ - reversed). • Do not use batteries with visible damage. • Do not subject batteries to fire or high temperatures. • Do not attempt to recharge, short, or disassemble.

Carefully observe the following warnings when using this product near young children or persons who may have a difficulty perceiving the potential danger associated with these products.

		<p>Use caution. Always keep out of reach when not in use. If caution is not used, the following accidents, and others, may occur:</p> <ul style="list-style-type: none"> • Flash fire near the eye. • Fingers caught in a running motor. • Strap wound around the neck.
		<p>YOUNG CHILDREN MAY SWALLOW SMALL OBJECTS. Keep small accessories, or things that could be swallowed, away from young children. Contact a doctor immediately if an object is swallowed.</p>
		<p>YOUNG CHILDREN MAY SWALLOW BATTERIES. Keep batteries away from young children.</p>

SAFETY CAUTIONS FOR USE OF THE AC POWER ADAPTER AC-M515

	WARNING
	Use only the indicated voltage.
	Do not place a container of water or other liquid on the product. If water or other liquid gets inside the product, it may cause a short resulting in fire or electric shock. Immediately unplug, discontinue use, and contact a Minolta Service facility.
	Keep plug clean of dust and dirt. Insert plug completely into the electrical outlet.
	Do not use extension cords, or multiple cord adapters. Insert plug directly into wall outlet.
	Do not misuse the power cord. Damage to the cord may result in fire or electric shock.
	<p>Do not perform any of the following acts to the cord:</p> <ul style="list-style-type: none"> • Scratch • Modify • Cut cord or replace plug • Twist • Bend • Place a heavy object on • Pull • Heat
	Do not place unit in a dusty or humid area.

SAFETY CAUTIONS CONT.

WARNING



If there is smoke, a strange smell, or any other unusual conditions, immediately unplug unit, discontinue use, and contact a Minolta Service facility.



CAUTION



Grasp the plug when removing the cord from an outlet. Pulling the cord may damage it resulting in fire or electric shock.



Never pull the plug if your hands are wet, or if you are standing in water.



Do not attempt to disassemble this product; it contains high-voltage circuits. For repairs, contact a Minolta Service facility.



Disconnect the AC adapter when it is not in use.



SAFETY CAUTIONS FOR THE LITHIUM ION BATTERY



1. Use only the battery charger specified for this unit.
2. Never heat the battery or expose it to fire. Do not disassemble or modify the battery. Do not intentionally or unintentionally short circuit the battery terminals.
3. Do not leave the battery in hot places, such as inside a car, or in direct sunlight. Exposure to temperatures over 60°C (140°F) may cause damage.
4. Do not drop the battery or subject it to mechanical shocks.
5. Use the battery only in the specified apparatus.



1. Do not put the battery in a microwave oven or clothes dryer.
2. Stop using, or charging, battery if there is smoke, a strange smell, or any change of color or shape.



If the battery leaks liquid, or there is a strange smell, keep battery away from heat or open flame.



If liquid from inside the battery gets into the eyes, flush with water and consult a physician immediately.

SAFETY CAUTIONS CONT.

HANDLING CAUTIONS FOR THE RD-175 DIGITAL CAMERA

BATTERY CAUTIONS

- When photographing in cold weather, we recommend that you keep the camera and spare batteries inside your coat to keep them warm when you are not shooting. Cold batteries will regain some of their charge when they warm up.
- The low battery symbol may appear even with a fresh battery depending on the storage conditions. To restore camera power, repeat turning the camera on and off.

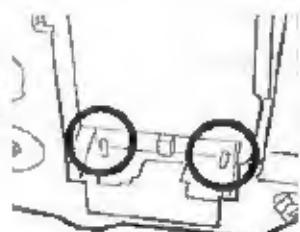
OPERATING TEMPERATURE AND CONDITIONS

- This digital camera is designed for use from -20° to 50°C (-4° to 122°F).
- Never leave the digital camera where it may be subjected to extreme temperatures such as the glove compartment of a car.
- At colder temperatures, the data panel response time will be slow; at higher temperatures, the display will temporarily darken, but will restore when the temperature normalizes.
- Never subject the digital camera to extreme humidity.
- To prevent condensation from forming, place the digital camera in a sealed plastic bag when bringing it from the cold exterior to a warm building. Allow it to come to room temperature before removing it from the bag.

HANDLING CARE

- This digital camera is not waterproof, dustproof, or sand proof. Take care when using at the beach or near water - costly or irreparable damage to the camera may occur.

- Do not touch the lithium-ion battery contacts on the digital camera (showing the figure to the right). The lithium-ion battery contacts can be seen when the lithium-ion battery case is removed.



HANDLING INSTRUCTIONS FOR THE NP-500H LITHIUM ION BATTERY

PROHIBITIONS FOR HANDLING OF LITHIUM ION BATTERIES

- Never heat the battery or expose it to fire.
- Do not disassemble or modify the battery.
- Do not leave the battery in hot places, such as inside a car or in direct sunlight. Temperatures over 60°C (140°F) may cause damage.
- Do not allow necklaces, chains, or other metal items to come in contact with the battery's + and - terminals, as this could lead to excessive heat, fire, or explosion of the battery.
- Do not allow the battery to come in contact with water. Never use a wet battery.
- Do not drop the battery, or subject it to mechanical shocks.
- Do not directly solder the battery.

CHARGING

- Use only the battery charger specified.
- Be sure that the battery terminals are correctly aligned before recharging.
- Perform the charging within the temperature range of 0°C to + 45°C (32°F to 113°F).

DISCHARGING

- Do not use the battery in devices not designed for its use.
- Avoid discharging the battery below 2.5V. Never discharge the battery below 1.0V.
- Perform discharging within a temperature range of -20°C to 60°C.

STORAGE

- For long term storage, discharge the battery before storing.
- Store in a cool and dry place. In particular, avoid leaving the battery in high temperature areas.

SAFETY CAUTIONS CONT.

HANDLING CAUTIONS FOR THE AC CONVERTER AC-M515

OPERATING TEMPERATURE AND CONDITIONS

- This AC converter is designed for use from 0° to 40°C (32° to 104°F).
- Do not leave the AC converter where it may be subjected to extreme temperatures, such as the glove compartment of a car.
- Do not subject the AC converter to extreme humidity.
- To prevent condensation from forming, place the AC converter in a sealed plastic bag when bringing it from the cold exterior to a warm building. Allow it to come to room temperature before removing it from the bag.

HANDLING CARE

- The AC converter is not waterproof, dustproof, or sand proof; take care when using at the beach or near water - costly or irreparable damage to the camera may occur.

BEFORE YOU BEGIN

Before you begin, check the packing list. If some of the parts are missing, contact the nearest Minolta Service facility.

- Digital Camera RD-175
- AC power adapter AC-M515
- DC power cord
- Lithium ion battery NP-500H
- Lithium battery 2CR5
- PC card
- Holding Strap HS-700
- SCSI Cable
- Floppy disk
- Digital Camera RD-175 instruction manual
- Software instruction manual
- Warranty card

INDEX

FOR PROPER AND SAFE USE	2
BEFORE YOU BEGIN	11
INDEX	12
NAMES OF PARTS	
Camera Body	14
Data Panel	16
Viewfinder Display	17
QUICK OPERATION	18
BASIC OPERATION	
Attaching the Holding Strap	21
Inserting Batteries	22
Battery Condition Indicators	24
Attaching and Removing the Lens	26
Handling the Camera / How to Press the Shutter-Release	27
Inserting the PC Card	28
Taking Pictures in Fully-Automatic Mode	30
Removing the PC Card	32
FOCUS DETAILS	
Focus Signals	35
Special Focusing Situations	36
Focus Lock	37
Manual Focus	38
Autofocus Illuminator	39
ADVANCED OPERATION	
Setting the White Balance	41
Exposure Mode	43
Selecting the Exposure Mode	43
A Mode: Aperture Priority	44
S Mode: Shutter Priority	45
M Mode: Manual Exposure	46
Exposure Compensation	47
Self Timer	48
Remote Release Terminal	49

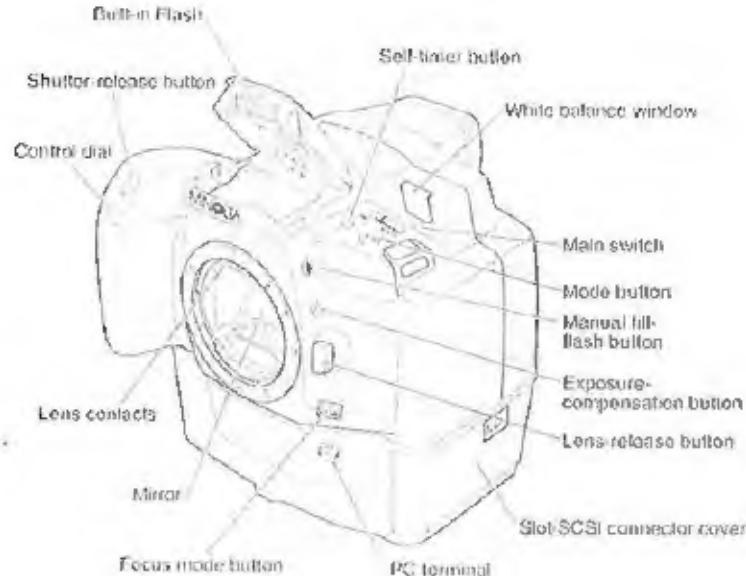
FLASH DETAILS

Using the Built-in Flash	51
Built-in Flash Precautions	52
Using Flash in P, A, S, M Modes	53
Red-Eye Reduction	54
Wireless / Remote Off Camera Flash	55
P.C. Terminal	60

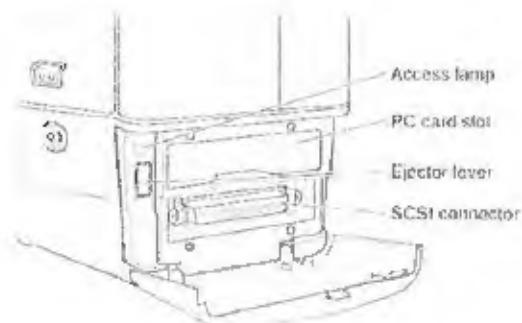
APPENDIX

About the PC Card	62
About the Lithium Ion Battery	64
Accessory Information	66
Exposure Warnings	67
Troubleshooting	68
Clock Battery Replacement	70
Care and Storage	72
Technical Details	74

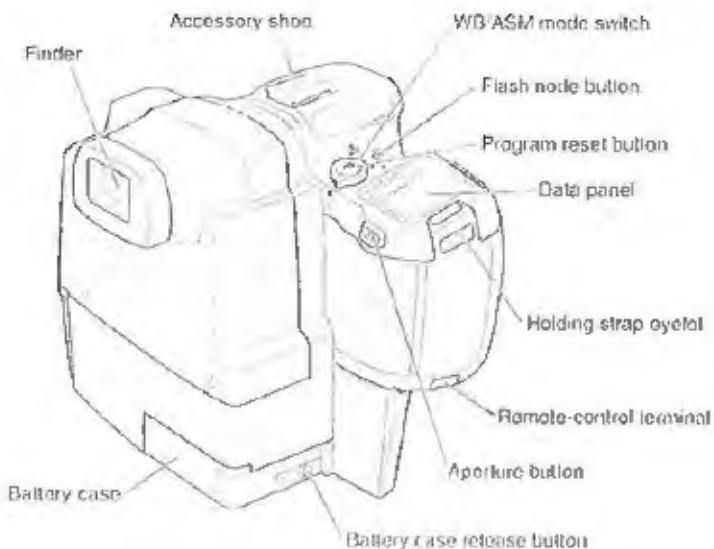
NAMES OF PARTS - Camera Body



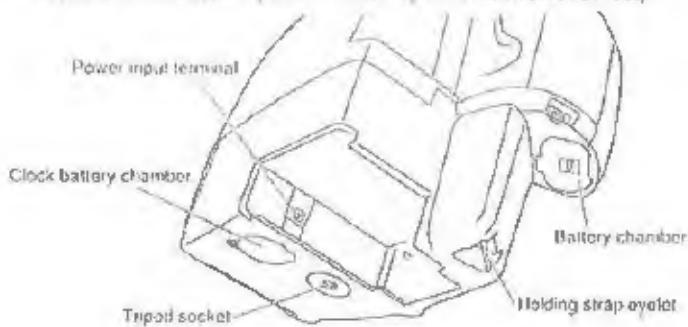
Inside the slot/SCSI connector cover



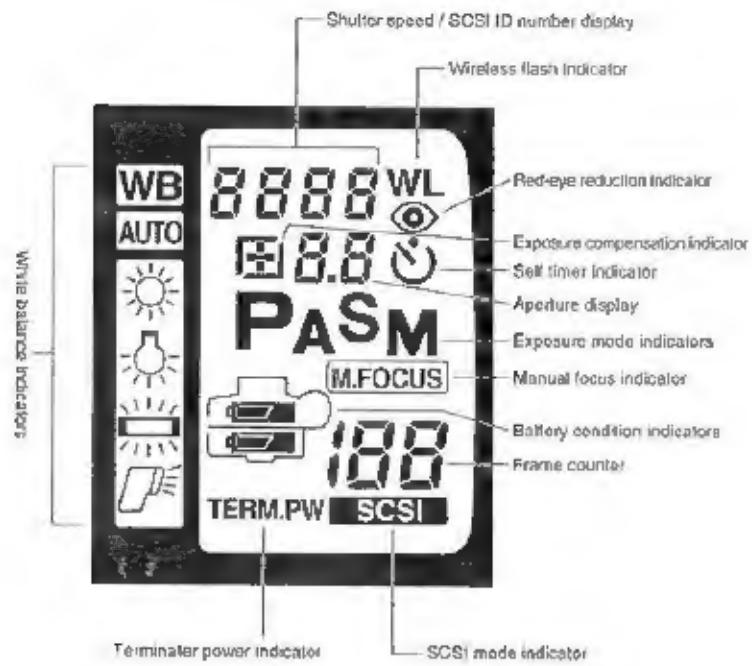
NAMES OF PARTS - Bottom of the Camera Body



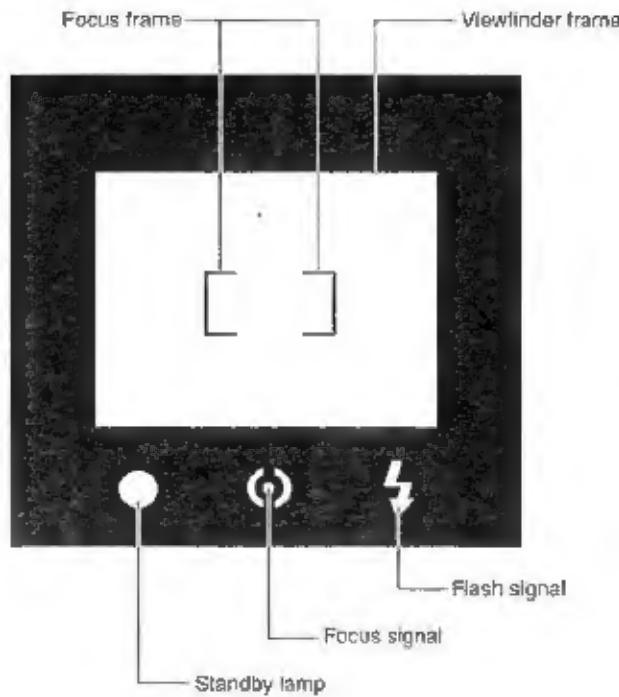
Bottom of the camera (after the Battery case has removed out)



NAMES OF PARTS - Data Panel



NAMES OF PARTS - Viewfinder Display



QUICK OPERATION



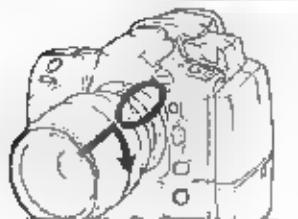
1 Insert lithium battery

Insert one 6 volt 2CR5 lithium battery into the chamber as indicated by the + and - marks on the inside of the battery cover



Install lithium ion battery

Press the battery case release button and slide the battery case out. Insert the NP-500H lithium ion battery as illustrated on the inside of the battery case. Slide the battery case back into the camera until it clicks.



2 Attach Lens

Align the red mounting index on the lens with the one on the camera. Gently insert the lens into the mount and turn the lens clockwise until it clicks into the locked position



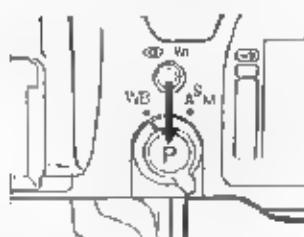
3 Insert PC card

Open the slot/SCSI connector cover. Insert the PC card, as shown, until the card stops



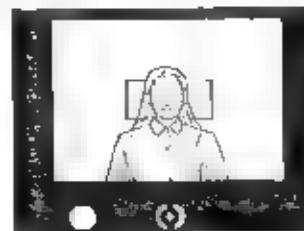
4 Turn on power

Slide the main switch to ON. Wait until the frame counter displays the number of remaining frames in the data panel.



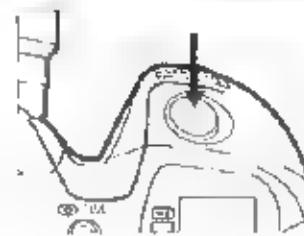
5 Set Full-Auto mode

Press the program reset button to set the camera to fully automatic mode



6 Focus on subject

Align the subject within the focus frame and press the shutter-release button partway down to activate the autofocus. The AF lock indicator will glow when the subject is in focus



7 Take the picture

Check that the standby lamp in the viewfinder is illuminated. Gently press the shutter-release button all the way down to take the picture

BASIC OPERATION

Attaching the Holding Strap

You will have a better grip on the RD-175 Digital Camera, if you attach the HS-700 Holding Strap to the camera.



- 1 Pass one end of the Holding Strap through the lower strap eyelet in the RD-175 and attach as shown.



- 2 Pass the other end of the Holding Strap through the upper strap eyelet and attach as the same way shown above.

Inserting Batteries

The digital camera uses a 2CR5 lithium battery and an NP-500H rechargeable lithium ion battery. The 6-volt 2CR5 lithium battery powers all camera operations. The NP-500H rechargeable lithium ion battery supplies power for recording and copying digital images.

- Please read all warnings in the Safety Cautions section of this manual, as well as those supplied by the battery manufacturer.



- 1 Push the cover release in the direction of the arrow to open the battery chamber cover.



- 2 Insert the 2CR5 6 volt battery into the chamber as indicated by the + and - marks inside the battery cover. Close the cover until it clicks and locks closed.



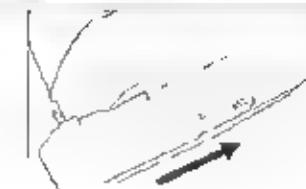
- 3 While pressing the battery case release button, slide the battery case out.



- 4 Insert the NP-500H lithium ion battery into the battery case as shown.

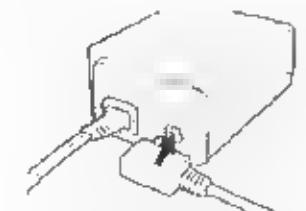
Using the AC Power Adapter

- 5 Slide the battery case back into the camera until it clicks.



Use the AC Power Adapter AC-M515 when the battery charge is low, an AC source is readily available, or images are being copied to the Macintosh.

- 1 While pressing the battery case release button, slide the battery case out.



- 2 Connect the adapter cord to the AC power adapter.



- 3 Plug the other side of adapter cord into the power input terminal in the digital camera as shown.



- 4 Plug the AC power adapter into an AC outlet.

Battery Condition Indicators

This camera is equipped with an automatic battery power indicator. Each time the main switch is turned ON, symbols will appear in the data panel to indicate the power status of the batteries.



indicates the condition of lithium battery

indicates the condition of lithium ion battery

A graphic icon of a camera body with two batteries. Both batteries are solid black, representing full charge.	Full battery symbol: power is sufficient for all digital camera operations
A graphic icon of a camera body with two batteries. The top battery is solid black, representing a full charge. The bottom battery has a diagonal hatching pattern, representing a low charge.	Low battery symbol: power is sufficient for all digital camera operations, but is getting low.
A graphic icon of a camera body with two batteries. Both batteries have a diagonal hatching pattern, representing extremely low power.	<p>Blinking low battery symbol appears with other displays</p> <p>2CR5 ~ Power is extremely low. Replacing with a new battery is recommended</p> <p>NP-500H ~ Power is extremely low. One of the following operations is recommended</p> <ol style="list-style-type: none">1 Replace NP-500H with a new battery2 Charge the NP-500H battery3 Use the AC power adapter instead of the battery
A graphic icon of a camera body with one battery. The battery has a diagonal hatching pattern, representing extremely low power.	<p>Blinking low battery symbol appears alone</p> <p>2CR5 ~ Replace 2CR5 with a new battery immediately</p> <p>NP-500H ~ One of the following operations is necessary</p> <ol style="list-style-type: none">1 Replace NP-500H with a new battery2 Charge the NP-500H battery3 Use the AC power adapter instead of the battery

Data Panel Display



If no data appears in the data panel, replace the battery or check that it is inserted correctly

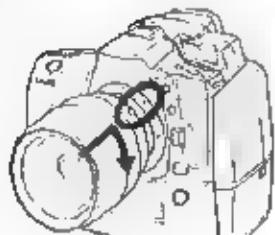
- The RD-175 digital camera uses two batteries. 2CR5 lithium battery supplies power for camera function (auto-focus, auto-exposure etc). The NP-500H rechargeable lithium ion battery supplies the power for recording and playback of digital images taken by RD-175.
- When the power of one battery is extremely low (blinking low battery symbol appears alone in the data panel) the RD-175 will not function even if the other battery has a full charge.

Attaching and Removing the Lens

ATTACHING THE LENS



- 1 Remove the camera body cap and rear lens cap as shown



- 2 Align the red mounting index on the lens with the one on the camera. Gently insert the lens into the mount and turn it clockwise until it clicks into the locked position

REMOVING THE LENS



- 1 Press and hold the lens-release button, then turn the lens counter-clockwise until it stops. Gently remove the lens from the mount. Replace caps, or immediately attach another lens

Caution

- Do not force the lens if it does not turn smoothly
- Do not touch the inside of the camera, especially the lens contacts or the mirror

Handling the Camera / How to Press the Shutter-Release

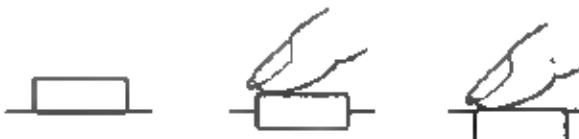
HOLDING THE CAMERA



Hold the camera grip firmly with your right hand while supporting the camera or lens with your left hand. Make sure that your fingers are not blocking any of the camera's features; they should fit securely around the grip. To hold the camera steady, always keep your elbows at your side and your feet shoulder-width apart for support. Always keep the camera strap around your neck or wrist in the event you accidentally drop the camera.

HOW TO PRESS THE SHUTTER-RELEASE

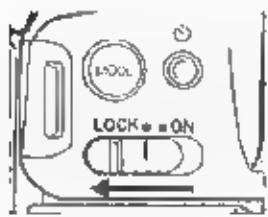
The shutter release button has three positions. Press the shutter release button halfway down to activate the camera's autofocus and autoexposure systems. Gently press the shutter-release button all the way down to take the picture (never with a quick jab).



Inserting the PC Card

This camera uses a PC card as its recording device. The standard accessory card has already been initialized for use in this camera and can be used immediately.

PC cards sold in stores can be used as a recording media, however, these cards need to be initialized before use. And some PC cards are incompatible for this digital camera. If you want to use PC cards sold in stores, contact a Minolta Service Facility for details before you use.



- 1 Slide the main switch to lock
**PERFORM THIS OPERATION BEFORE
INSERTING THE PC CARD**

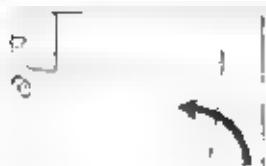


- 2 Open the slot/SCSI connector cover



- 3 Insert the PC card as shown, push the card in until it stops

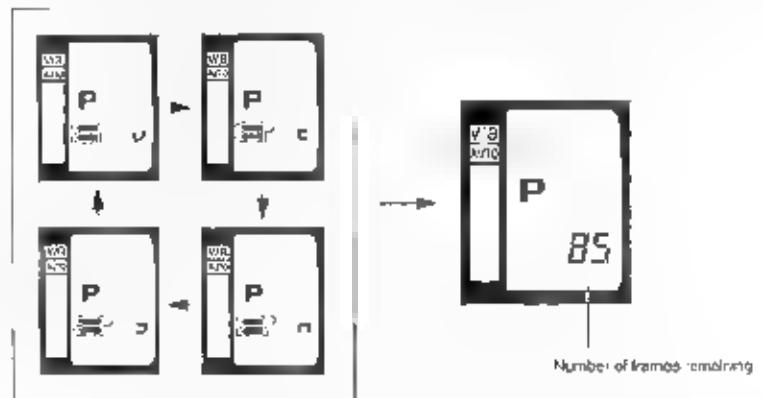
Initial loading starts when the main switch is turned on.



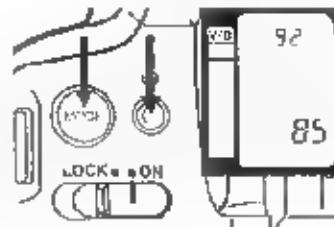
- 4 Close the slot/SCSI connector cover and slide the main switch to ON.

Initial loading starts when the main switch is turned on. The card is scanned and the recording lead moves to the first available space on the PC card. While loading, the frame counter will cycle as shown.

When loading is complete, the standby display will appear showing the number of frames remaining.



To display the maximum capacity of the PC card

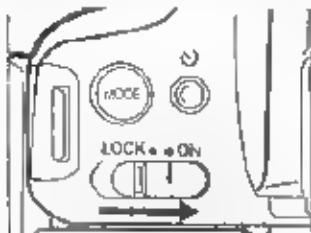


While pressing the mode button press the self timer button.

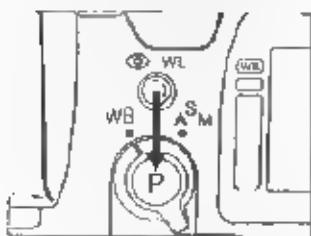
- The maximum capacity of the card will appear at the top center of the data panel.
- When the buttons are released, the card capacity will no longer be displayed.

Taking Picture in Fully-Automatic Mode

Fully Automatic mode is the camera's standard operating mode, and is suited for virtually any situation. When you press the program-reset button, all the camera's functions are set to fully automatic operation.



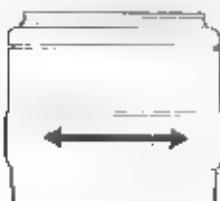
- 1 Slide the main switch to ON.



- 2 Press the program reset button to set the camera to program mode.



- 3 Grip both sides of the built-in flash and gently lift.
 - The flash will fire automatically when necessary.



- 4 If using a zoom lens, rotate the zooming ring on the lens to frame the subject as desired

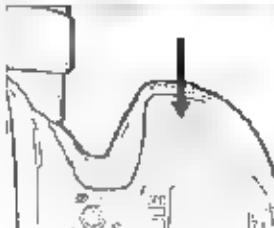
Focus frame
Standby lamp



- 5 Align the subject within the focus frame [] and press the shutter release button partway down to activate autofocus



- 6 The standby lamp in the viewfinder will glow when the digital back is ready to take the picture

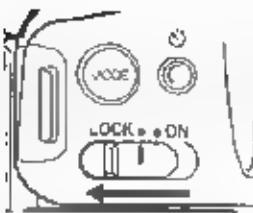


- 7 Press the shutter release button all the way down to take the picture

• Refer to page 37 when you want to take a picture with your subject outside the focus frame

Removing the PC Card

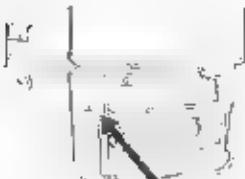
When the card is full, "0" will be displayed in the data panel and the shutter will lock. Remove the full PC card and replace with a new PC card.



1 Slide the main switch to lock

PERFORM THIS OPERATION BEFORE REMOVING THE PC CARD OR DATA MAY BE LOST

- Wait until the data displays disappear



2 Open the slot/connector cover and press the ejector lever

- The PC card will slide out



3 Insert a new PC card according to the instructions described on page 28

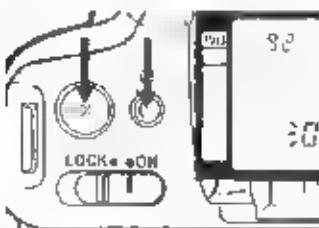
- When removing the PC card which is only half full, follow steps 1 and 2

If a new card is not available, set the camera to SCS mode and transfer the images on the card to the computer. Then delete the image(s) on the card. See software manual page 22 for details

If the computer is not nearby, and a new card is not available, the last image can be overwritten.

CAUTION

Overwriting will delete the last image. Once overwritten the image can not be recovered.



1 Press and hold the mode button and the self timer buttons

- "0" will blink in the frame counter



2 Turn the control dial one click

- The blinking "0" will change to a blinking "1"
- If you want to discontinue this operation, turn the control dial on till the blinking "0" reappears in the viewfinder



3 Release the mode and self timer buttons

- The "1" will stop blinking, indicating the digital camera is ready to overwrite the last image
- Only the last image can be overwritten. If you want to repeat the overwrite, repeat steps 1-3.

FOCUS DETAILS

Focus Signals



The focus signals appear at the base of the viewfinder when the shutter is pressed partway down.

The color of the focus signal indicates the focus situation.

Glows Green: Focus is confirmed and locked

Glows Orange: Continuous autofocus; focus is confirmed

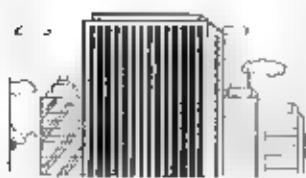
Glows Red: Focus is not possible (shutter locked). Your subject is too close or is one of the special focusing situations described on the next page

Special Focusing Situations

In the situations like the ones described below it may be difficult or impossible for the camera to focus accurately -- you may have to use focus lock or manual focus (page 37 and 38)



If two subjects at different distances overlap in the focus frame



If a subject composed of alternating light and dark lines completely fills the focus frame



If the subject within the focus frame is very bright, or low contrast

Focus Lock

Focus lock should be used when you want to take a picture with your subject outside the focus frame [] or in situations where autofocus is difficult to confirm



- 1 Center your subject in the focus frame [], and press the shutter release button partway down
 - The focus lock indicator will glow al green when the focus is locked



- 2 Continue to hold the shutter-release button partway down while you recompose your picture as desired.
- 3 Press the shutter release button all the way down to take the picture.

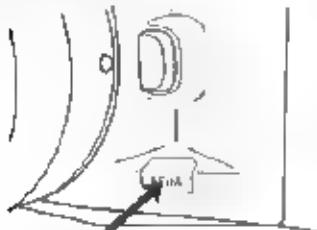
- Focus lock cannot be used with moving subjects

Alternate Focus Lock Methods

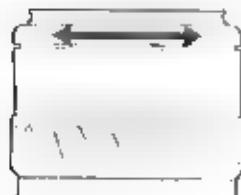
- If using a manual zoom lens with a focus hold button, lock focus by pressing the focus hold button.
- Using an AF Zoom xi or AF Power Zoom lens, lock focus by pulling the lens control ring towards you

Manual Focus

In situations where the autofocus system is not suitable and focus lock is not possible, you may focus the lens manually.



- 1 Press the focus-mode button so that the manual focus indicator **M.FOCUS** appears in the data display



- 2 Turn the lens focusing ring until the image in the viewfinder appears clear and sharp.

- The autofocus system will continue to monitor focus and will indicate when the subject within the focus frame is in focus.
- When using an xi-series, or power zoom lens, pull the control ring toward you and then rotate it in either direction to focus.



Autofocus Illuminator

If the flash is raised and the camera detects that the scene is too dark to focus accurately, the flash will automatically fire a few short bursts before and after the lens focuses (AF illuminator). This provides the light necessary for the camera to detect and focus on your subject.

- The range of the AF illuminator flash is approximately 1 to 5m (3.3-16 ft.).
- The AF illuminator flash may not fire when the focal length you are using is 300mm or more, or when the AF Macro ZOOM 3X-1X is used.

TO TURN THE AF ILLUMINATOR OFF



Press and hold the flash mode button while you turn the camera on

- "OFF AF" appears in the data panel.
- To turn the AF Illuminator again, repeat the procedure so that "on AF" appears in the data panel.

ADVANCED OPERATION

Setting the White Balance



White Balance Window

This digital camera has automatic white balance. Beautiful images can taken under any light source. However, manual white balance is necessary when the light source illuminating the white balance window is different than the light source illuminating the subject.

For example if the camera is in a room illuminated by a fluorescent lamp, and the subject is outside illuminated by direct sunlight, manually set the white balance to the daylight mode.

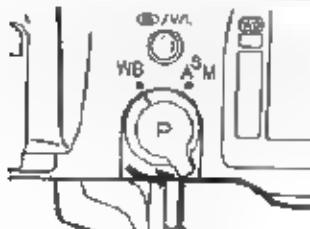
This camera has five white balance modes.

This camera has five white balance modes.

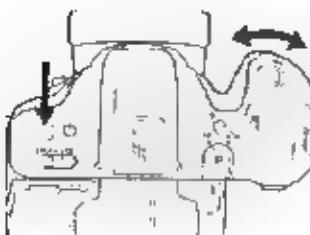
AUTO		Auto white balance
	Daylight	- used when the subject is illuminated by daylight
	Tungsten	- used when the subject is illuminated by tungsten (incandescent) light
	Fluorescent	- used when the subject is illuminated by fluorescent light
	Flash	- used when the subject is illuminated by flash. It is necessary to set this mode manually when using a PC mounted or non-dedicated flash

Setting the White Balance Cont.

To set the white balance manually



- 1 Turn the WB/ASM mode switch to white balance (WB)



- 2 While pressing the mode button, turn the control dial until the desired indicator blinks in the data panel



- The blinking WB mode is selected when you release the mode button (the other WB indicators will disappear).

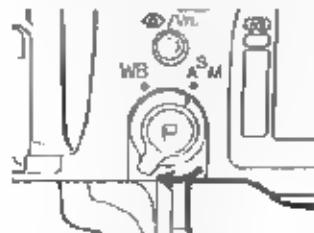
- Pressing the program reset button returns the camera to the auto white balance mode.
- When using the built-in or a dedicated flash in auto white balance mode, the white balance is automatically set to flash mode.

Exposure Mode

This camera has four different exposure modes: Aperture priority, Shutter priority, Manual, and Program. The exposure modes allow you to tailor the degree of camera control needed to capture the desired image. For information on P mode, refer to "Taking Pictures In Fully-Automatic Mode" beginning on page 30.

A Mode	Manually select aperture
S Mode	Manually select shutter speed
M Mode	Manually select aperture and shutter speed

Selecting the Exposure Mode



- 1 Turn the WB/ASM mode switch to ASM.

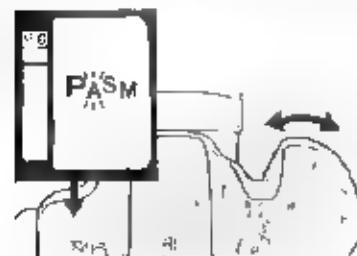


- 2 While pressing the mode button, turn the control dial until the desired indicator blinks in the data panel

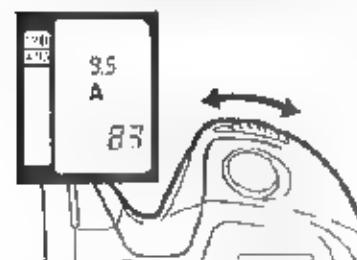
- The blinking exposure mode is selected when you release the mode button
- When you press the program reset button, the camera is returned to Fully-Automatic operation.

A Mode : Aperture Priority

In A mode, you select the aperture and the camera automatically sets the shutter speed required for proper exposure. This mode should be used when you want to control the range of sharpness (i.e. depth of field) in an image. Large apertures (small numbers) provide a short depth of field which is ideal for portraits.



- 1 Turn the WB/ASM mode switch to ASM
- 2 While pressing the mode button turn the control dial until A blinks in the data panel.
 - The aperture priority mode is selected when you release the mode button.



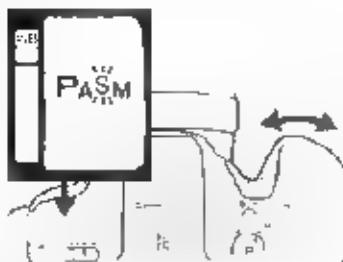
- 3 Turn the control dial to select the aperture
 - Aperture range depends on the lens used; however, f/6.7 is the maximum and f/22 the minimum available aperture with this camera.

- In the viewfinder, only the plane on which the camera is focused will appear sharp. The photographed image however, will have depth of focus corresponding to the aperture used.
- If 2000 or 2 blinks in the data panel, the required setting is beyond the camera's shutter speed range. Turn the control dial until the blinking stops. (See "Exposure Warnings" beginning on page 67 for more exposure warnings.)
- See page 53 for information on flash exposure in A mode.

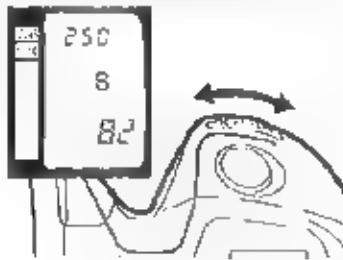


S Mode : Shutter Priority

In S mode, you select the shutter speed and the camera automatically sets the aperture required for proper exposure. This mode is useful for photographing moving subjects when you want to control subject blur. Faster shutter speeds can stop subject motion.



- 1 Turn the WB/ASM mode switch to ASM
- 2 While pressing the mode button turn the control dial until S blinks in the data panel.
 - The shutter priority mode is selected when you release the mode button.



- 3 Turn the control dial to select the shutter speed.
 - Only shutter speeds between 1/2 and 1/2000 sec. are available with this camera.

- The number 60, or 125, displayed in the data panel stands for 1/60 or 1/125 of a second.
- If the aperture display blinks in the data panel, the required setting is outside the aperture range of the lens. Turn the control dial until the blinking stops. (See "Exposure Warnings" beginning on page 67 for more exposure warnings.)
- See page 53 for information on flash exposure in S mode.



M Mode : Manual Exposure

In M mode you have full control of the exposure. You select both the shutter speed and the aperture. The data panel will tell you if the exposure you have selected is over, under or the same as the metered exposure.

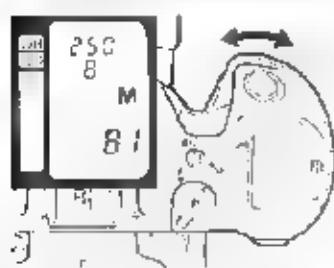


- 1 Turn the WB/ASM mode switch to ASM

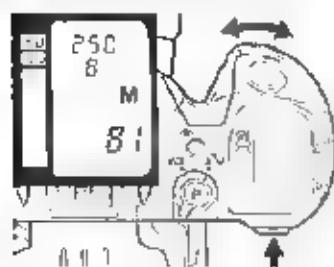
- 2 While pressing the mode button turn the control dial until M blinks in the data panel.

• The manual mode is selected when you release the mode button.

- 3 Turn the control dial to select the shutter speed

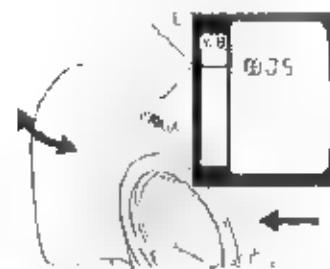


- 4 While pressing the aperture button turn the control dial to select the aperture.



Exposure Compensation

This feature lets you compensate the exposure ± 3 stops in 1/2 stop increments. Exposure compensation is used when the camera's metering system cannot correctly determine the precise exposure.



- 1 While pressing the exposure-compensation button turn the control dial until the compensation value you want appears in the data panel.



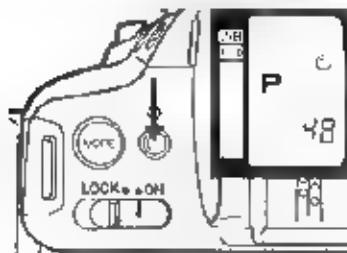
- 2 Release the exposure-compensation button to enter the selected value

• + or - will remain in the data panel display as a reminder that exposure compensation is set.

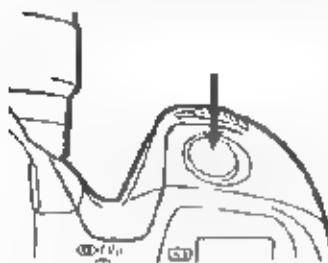
• To cancel exposure compensation, perform the above procedure and select "0.0".

Self Timer

The self-timer will delay release of the shutter for approximately ten seconds after you press the shutter-release button, giving you time to get into the picture.



- 1 Press the self timer button. Self-timer indicator will appear on the data panel. Pressing the self-timer button again will cancel the self timer.

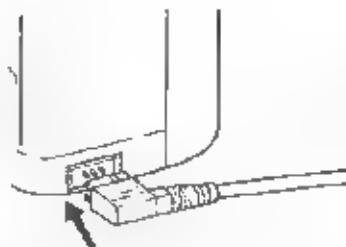


- 2 Compose the picture and press the shutter-release button all the way down to start the self timer.
 - The self-timer lamp on the front of the camera will blink until the shutter releases.

- Self-timer mode will automatically cancel after the exposure.
- To cancel the self timer before the shutter releases, slide the main switch to lock.

Remote Release Terminal

To avoid blurry pictures, use of the optional Remote Cord RC-1000S (or L) is recommended.



Using Remote Cord

- 1 Remove the remote control terminal cover.
- 2 Insert the remote cord's plug into the terminal.

To Attach the Remote Terminal Cover after use

- 1 Align the prongs on the remote terminal cover with the remote terminal.
- 2 Carefully press the cover until it attaches.

- Do not force the cover at an angle; the prongs may break.

FLASH DETAILS

Using the Built-In Flash



The built-in flash provides coverage for lens focal lengths as short as 28mm. The flash output is controlled automatically by the camera's TTL (through the lens) flash metering system.

Grip both sides of the built-in flash and gently lift. After you have finished using the flash, push it back down.

FLASH SIGNALS

(No Display)

Built-in flash is up or accessory flash is on and charging.



glowing

Flash is charged and will fire when the shutter release is pressed.



blinking

(After picture is taken, blinks rapidly) Flash output was sufficient to provide correct exposure.

- If doesn't blink after the picture is taken, flash output was not sufficient. Make sure your subject is within the flash range (see next page) and release the shutter after flash is charged.

Built-in Flash Precautions

FLASH RANGE

The range of the built-in flash depends on the aperture selected. Make sure your subject is within the working range of the flash, specified in the table below.

Aperture	Flash Range
F 6.7	1.0 - 5.0m (3.3 - 16.5 ft.)
F 8	1.0 - 4.2m (3.3 - 13.8 ft.)
F 9.5	1.0 - 3.5m (3.3 - 11.5 ft.)
F 11	1.0 - 3.1m (3.3 - 10.2 ft.)
F 16	1.0 - 2.1m (3.3 - 6.9 ft.)

If you want to take flash photographs closer than 1m (3.3 ft.) we recommend that you use Minolta's Close-Up Diffuser CD-1000. Otherwise lens shadowing may occur in the bottom of your picture. This accessory provides softer lighting for more pleasing close-up photographs.

CAUTION: LENS SHADOWING MAY OCCUR

Lens shadowing may occur at the bottom of your pictures when using the built-in flash with certain Minolta AF lenses. To reduce the chance of lens shadowing, never use a lens wider than 28mm, never use a lens hood, and do not photograph closer than 1m (3.3 ft.)

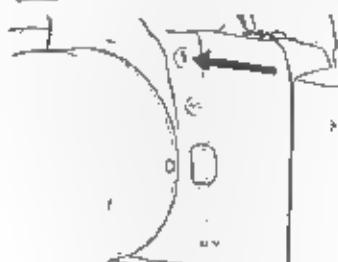
Built-in flash should not be used with the following lens:
AF 800mm f/4 APO

Using Flash in P, A, S, M Modes

USING FLASH IN P MODE

When the built-in flash is up, or an attached accessory flash is on, it will automatically fire in low-light or back-lit situations. The camera will select the most appropriate shutter speed and aperture.

TO FIRE THE FLASH MANUALLY



In P mode, you can manually fire the built-in or accessory flash. Press and hold the manual flash button while you take the picture.

USING FLASH IN A, S, M MODES

When the built-in flash is up, or an attached accessory flash is on, it will fire each time you take a picture. When the built-in flash is down, or an attached accessory flash is off, it will not fire.

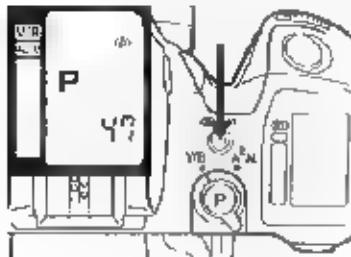
A MODE FLASH: You can select any aperture from f/6.7-f/22 and the camera will automatically set the shutter speed.

S MODE FLASH: Operation in the S mode is the same as P mode. The camera will automatically set the aperture and the shutter speed.

M MODE FLASH: You can select any aperture from f/6.7-f/22 and any shutter speed between 1/90 and 1/2 second.

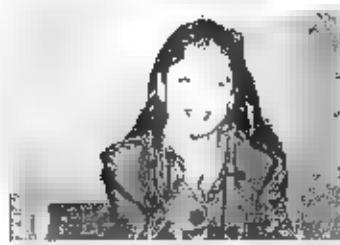
Red-Eye Reduction

When photographing people or animals at night or in low light situations, the effect called "Red-Eye" may occur due to the flash reflecting off the retina of the subject's eyes. To reduce this effect and to produce more natural looking pictures, use the red-eye reduction mode with the built-in flash.



1. Press the flash mode button so that the red-eye indicator  appears in the data panel.
2. Warn your subject that the flash will fire a few short flash bursts just before the picture is taken.
 - To cancel red-eye reduction, press the flash mode button again so that  no longer appears in the data panel.

Wireless / Remote Off Camera Flash



Normal Flash



Wireless Remote Flash



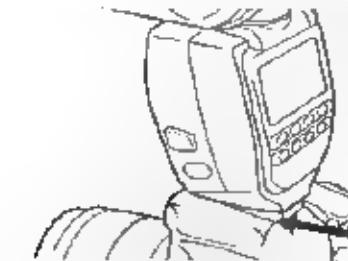
Wireless Remote Radio Flash

Wireless / Remote Off-Camera Flash Control is available with the Minolta accessory flashes, 5400HS, 5400xi, or the 3500xi. Wireless / Remote flash allows you to experiment with creative lighting techniques using off camera accessory flashes without a tangle of accessory cords and connectors.

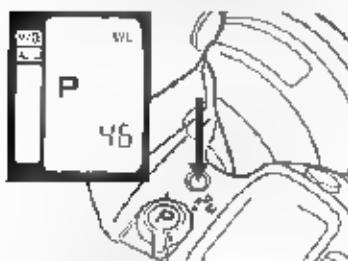
In Wireless / Remote flash mode the off camera flash is triggered by a coded signal from the camera's built in flash when you press the shutter release button. Another signal stops it once the camera's TTL flash meter detects that the proper exposure has been received. You can also obtain a 2:1 lighting ratio automatically. When selected, the off camera flash provides 2/3 of the full exposure and the built-in flash provides the remaining 1/3.

Wireless / Remote Off Camera Flash

SETTING WIRELESS / REMOTE FLASH MODE



- 1 Attach the accessory flash (5400HS, 5400xl or 3500xi) to the camera and turn both the flash and the camera on.



- 2 Press the flash mode button "WL" will appear in the data panel. The flash is now set for wireless / remote flash operation.

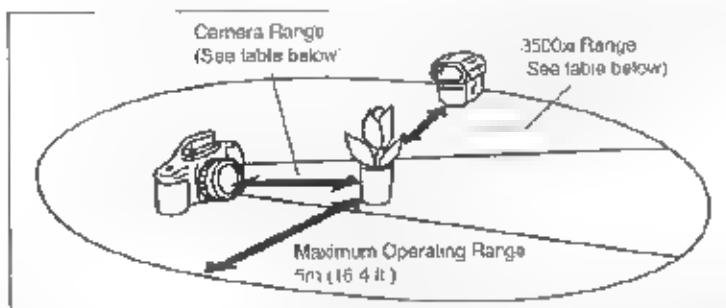


- 3 Remove the accessory flash, and raise the camera's built-in flash. The accessory flash is now ready to be positioned.

(Cont.)

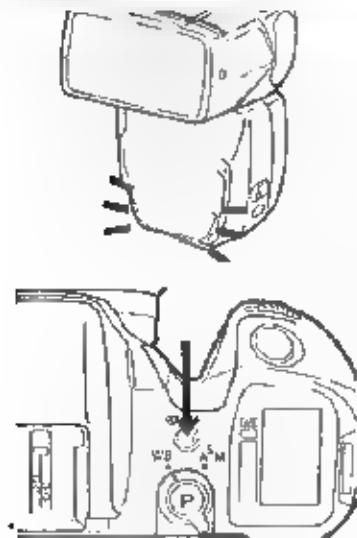
TAKING PICTURES IN WIRELESS / REMOTE FLASH MODE

- 1 Position your camera and 3500xi flash unit using the information on this page. If you are using a flash unit other than the 3500xi off camera, refer to the instruction manual for that flash.



Aperture	Camera-Subject Distance	3500xi-Subject Distance
F 6.7	17 - 5.0m / 5.6 - 16.4 ft	1.2 5.0m / 4.0 16.4 ft
F 8	14 - 5.0m / 4.6 - 16.4 ft	1.0 5.0m / 3.3 - 16.4 ft
F 9.5	12 - 5.0m / 4.0 - 16.4 ft	0.8 5.0m / 2.6 - 16.4 ft
F 11	1.0 5.0m / 3.3 16.4 ft	0.7 - 4.6m / 2.3 - 15.2 ft
F 13	1.0 5.0m / 3.3 16.4 ft	0.6 3.9m / 2.0 - 12.8 ft
F 16	1.0 5.0m / 3.3 16.4 ft	0.5 3.2m / 1.6 10.5 ft

Wireless / Remote Off Camera Flash



- 2** Wait for both flashes to charge
 - The accessory flash's AF illuminator will blink when the flash is fully charged
- 3** Press the flash mode button to test fire the accessory flash, and wait again for both flashes to charge
- 4** Press the shutter-release all the way down to take the picture.

(Cont.)

CANCELING WIRELESS / REMOTE FLASH



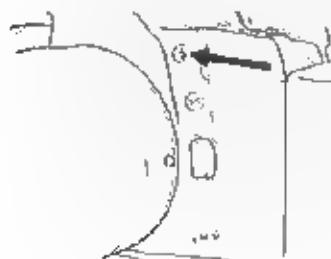
- 1** Reattach the accessory flash to the camera

- 2** Press the flash mode button so that "WL" disappears from the data panel

- To cancel wireless/remote flash mode on the 3500xi separately from the camera, first turn the flash off. Then press the ON/OFF button to turn the flash on and hold the button until the wireless lamp turns off
- To cancel wireless/remote flash mode on other flash units, refer to your flash owner's manual

WIRELESS / REMOTE RATIO CONTROL

In wireless / remote mode, when ratio control is selected, the output of the off-camera flash and the built-in flash combine to provide a 2:1 light ratio.



To use ratio control, press and hold the manual fill flash button then press the shutter-release button all the way down to take the picture.

P. C. Terminal

The digital camera's threaded PC terminal accepts PC type sync. cords from non-dedicated flash units, or flash units that do not have a hot shoe connector.



When you connect a sync. cord to the PC terminal, set the shutter speed to 1/90 sec. or slower. Manually set the white balance to the flash mode.

Certain Studio Flash Systems operate on a Negative Polarity triggering system (See below).

It is possible that when using a system of this nature in conjunction with the RD-175 the flash may not fire.

It is therefore recommended that before using a Studio Flash system of this nature you contact a Minolta Authorised Service Facility for advice.



Positive Polarity



Negative Polarity

- The trigger voltage of some flash units may be too high for the digital camera to fire the flash. If this is true of your flash contact an authorized Minolta service facility.

APPENDIX

About the PC Card

This digital camera uses the PC card (PCMCIA-ATA card) as its recording medium. PCMCIA is the abbreviation for Personal Computer Memory Card International Association, and is categorized into three types. The three types are Type I, Type II and Type III. The standard accessory card is a Type III card.

A Type I PC card has been included as a standard accessory. However, DOS formatted PC card can be used with this camera.

- The card slot is designed for Type II cards, but Type I and Type I cards are also compatible for use in the RD-175.
- Some DOS formatted PC cards will not be compatible with the RD-175 digital camera. If a card is not compatible, -- will appear in the frame counter. Please contact a Minolta Service Facility for details on non-compatible cards.



INITIALIZING A PC CARD

PC cards not supplied with this camera will need to be initialized. This operation is controlled by the computer connected to the RD-175 digital camera by the SCSI cable. Please refer to your software instruction manual for details.

Touching the PC card may interrupt operation when the RD-175 is set to the SCS mode (**SCSI** appears on the data panel). If this occurs, follow these steps to re-set the RD-175 to SCS mode:

1. Slide the main switch to LOCK and wait 3 seconds.
2. While pressing the mode button, slide the main switch to ON.

About the Lithium Ion Battery

This digital camera uses a lithium ion battery as the power source for the digital back. Lithium ion batteries have the following advantages:

- Compact-Lightweight-High Energy Density

Lithium ion batteries have approximately 30% less volume and are 35% lighter in weight than standard nickel cadmium batteries with the same discharge capacity.

- No Memory Effect

Lithium ion batteries can be recharged at any time, without the need for refresh discharge circuitry, and without fear of shortened usage time due to repeated shallow discharge cycles.

- Extremely Safe

By not using lithium metal or lithium alloys, lithium ion batteries have attained a high level of safety. Even the U.S. Department of Transportation's Dangerous Materials Division has declared lithium ion batteries exempt from dangerous materials regulations.

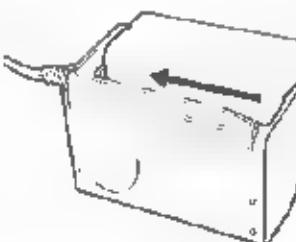


CAUTION

Please read "SAFETY CAUTIONS FOR THE LITHIUM ION BATTERY" and "HANDLING INSTRUCTIONS FOR THE NP-500H LITHIUM ION BATTERY" on this manual for proper and safe use.

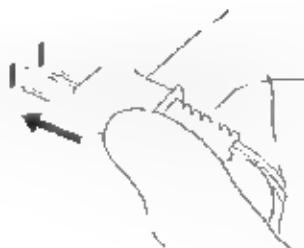
The lithium ion battery, like nickel cadmium batteries, is rechargeable. The packaged battery is half charged for shipping. When the capacity of the battery is low, the low battery symbol will blink in the data panel. When this display occurs, remove and recharge the battery.

HOW TO RECHARGE THE LITHIUM ION BATTERY



- 1 Attach the NP-500H lithium ion battery to the AC-M515 AC power adapter as shown.

• If the adapter cord is connected to the AC power adapter, disconnect it.



- 2 Plug the AC power adapter into a wall socket.

• Power and charge lamp will glow.
• It takes approximately two hours to obtain a full charge. Charge time depends on the temperature and battery condition.
• If the battery is left on the charge for more than four hours, the prevent circuitry in the battery will turn the charger off.

Accessory Information

This camera was designed to work specifically with lenses, flash units and other accessories manufactured and distributed by Minolta. Using incompatible accessories with this camera may result in unsatisfactory performance, or damage to the camera and accessories.

LENSES

- Minolta AF lenses can be used with this camera.
- Manual focus lenses (MD or MC) cannot be attached to this camera.
- See page 52 for lens shadowing when using the built-in flash.
- Some AF lenses are not suitable for use with this digital camera. Contact an authorized Minolta Service Facility for details.

FLASHES

- All Minolta xi, and HS-Series flash units can be used with this camera.
- When used with the RD-175, the guide number of a flash will be 2.8 times its value at ISO 100.
- See the flash instruction manual for the flash range.
- High Speed Sync (HSS) is not available with the RD-175.
- Red-eye reduction is not available with accessory flash units.
- To use an AF Series flash unit, Flash shoe adapter FS 1100 must be attached to the camera. When the flash is on, the flash will fire each time you take a picture. At no time will the flash's AF illuminator activate.

OTHER ACCESSORIES

The following accessories cannot be used with this camera.

- Angle Finder
- Magnifire
- Control Grip CG 1100
- Data Receiver DR-1000

Exposure Warnings

Mode	Display	Cause	Action
P		Light level is beyond the range of available shutter speeds and apertures.	In bright light, attach a neutral density (ND) filter, use film with lower ISO speed, or reduce the overall brightness of your surroundings. In low light, select M mode and use a hand-held mate, use higher speed film, or increase the brightness of your surroundings (i.e., use flash).
A		Required shutter speed is beyond the range of the camera.	Select a larger/smaller aperture until the display stops blinking.
S		Required aperture is beyond the range of the lens.	Select a faster/slower shutter speed until the display stops blinking.

Troubleshooting

Refer to these pages to determine the cause of a problem you are experiencing with your camera. If the information does not cover the problem which you are experiencing or the condition continues, contact your nearest Minolta Service Facility.

No display appears when the camera is switched on

- Batteries are exhausted.
If the camera battery is exhausted, install a new battery. If the lithium ion battery is exhausted, remove and recharge, or use the AC power adapter.

Help appears in the data panel

- Camera operation malfunction.
Remove and reinstall the battery in the camera body. If normal camera operation does not resume, contact a Minolta Service Facility.

Auto focus does not work when shutter-release button is pressed partway down

- Situation is unsuitable for autofocus.
Use focus lock or manual focus.
- Camera is set to the manual focus mode.
Set to the auto focus mode by pressing the focus mode button.
- Subject is too close.
Check the minimum focus distance for your lens.

Shutter cannot be released

- Camera has not been set to the standby mode.
Check that the standby lamp in the viewfinder is lit before pressing the shutter release.
- Focus cannot be confirmed.
Use focus lock, or manual focus.
- PC card has not been inserted yet.
Insert the PC card into the card slot according to the instructions on page 28.
- Camera is attached to a microscope or telescope.
Contact a Minolta service facility for information.

The Initial Load does not start after sliding the main switch to ON

- The PC card is not fully inserted into the card slot.
Remove card, then re-insert until it stops.

Flash fires when the shutter-release is pressed partway down

- The AF Illuminator is on.
This is a normal camera operation.

Flash picture is too dark

- Subject is beyond the flash range.
Make sure the subject is within the flash range.
- Flash is not charged.
Wait until appears in the viewfinder.

Er appears in the data panel

- Card access error.
Set the main switch to lock, remove the card and reinsert. If this display appears again, the card is defective or is not compatible. Contact a Minolta Service Facility.

Camera operation interferes with the television or radio

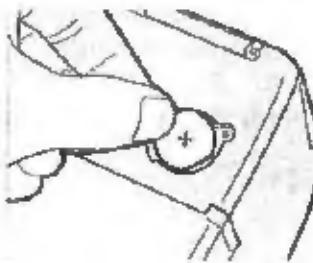
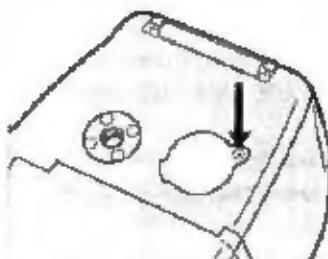
- Camera is too close to the television or radio.
Move back the camera from the television or radio.

Clock Battery Replacement

The clock inside the digital camera uses a 3V lithium battery (CR2025) to maintain memory while the digital camera battery 2CR5 is being changed. If this battery is exhausted, the clock settings in this digital camera will be lost when the camera battery is removed.

Replace the clock battery as follows:

If the date under the each images is incorrect after changing the camera lithium battery 2CR5, the clock battery may need to be replaced. See the "SETTING THE CLOCK IN THE RD-175" section in the Software Instruction Manual.



1 Remove the screw from the clock battery cover using a small Philips screwdriver.

2 Remove old battery.

3 Insert the new battery (+ side up). Replace the clock battery cover and retaining the screw.

After clock battery replacement, follow the instructions under "SETTING THE CLOCK IN THE RD-175" section in the Software Instruction Manual to reset the clock inside the digital camera.

Care and Storage

CLEANING

- If the camera or lens barrel is dirty, wipe it gently with a soft, clean, dry cloth. If the camera or lens comes in contact with sand, gently blow away loose particles - wiping may scratch the surface.
- To clean the lens surface, first brush away any dust or sand then, if necessary, moisten a lens tissue with lens cleaning fluid and gently wipe the lens in a circular motion, starting from the center.
- Never place lens fluid directly on the lens.
- Never touch the interior of the camera, especially the shutter and mirror. Doing so may impair their alignment and movement. Dust on the mirror will not affect the picture quality.
- Never use compressed air to clean the camera's interior, it may cause damage to sensitive interior parts.
- Never use organic solvents to clean the camera.
- Never touch the lens surface with your fingers.

STORAGE

When storing your camera for extended periods, please follow these guidelines:

- Always attach the protective caps.
- Store in a cool, dry, and well-ventilated area away from dust and chemicals such as moth balls. For very long periods, place the camera in an airtight container with a silica gel drying agent.
- Periodically release the camera's shutter to keep it operating properly.
- Before using after prolonged storage, always check the camera's operation to make sure it is functioning properly.

BEFORE IMPORTANT EVENTS

- Always check camera operation carefully, or take test photographs.
- Minolta is not responsible for damages incurred by equipment malfunction.

QUESTIONS AND SERVICE

- If you have questions about your camera, contact your local camera dealer or write to the Minolta distributor in your area.
- Before shipping your camera for repair, please contact an authorized Minolta Service Facility for details.

Technical Details (RD-175)

Image Sensor	1/2" CCD, Number of pixels : Total 410K (380K Effective)
Sensing System	3 CCD (G1, G2, R/B), Dual-Green System
Recording Format	DOS Format, 8 bit Digital recording
Recording Media	PC Card
Number of Frames	114 Frames (using standard accessory PC Card)
Autofocus	Minolta's through-the-lens (TTL) phase-detection system with CCD line sensor
AF Illuminator	Built-in-flash type, automatically activated in low-light/low-contrast conditions
Sensitivity	ISO 800 or equivalent
Shutter	Electronically-controlled, vertical-traverse, focal-plane shutter, Range : 1/2000 to 1/2 seconds, Flash sync : 1/90 sec. or slower, Wireless/remote flash sync : 1/45 sec.
Built-in Flash	Guide number : 12, Coverage for 28mm focal length, Recycling time : approx. 2 sec., Red-eye reduction pre-flash available
Viewfinder	Optical relay finder, Field of view : 90%, Magnification : 1.04X (with 50mm lens at infinity)
White Balance	Auto white balance with outer metering, Manual setting available
Interface	SCSI-II interface, PCMCIA Type III slot, PC-terminal, Remote-control terminal
Batteries	One 6V 2CR5 lithium battery pack and One 7.2V NP-500H Rechargeable lithium ion battery One 3V CR2025 lithium battery AC power adapter AC-M515 is available
Dimensions	161(W) x 128(D) x 145(H) mm
Weight	1.1 kg (without batteries, PC Card, lens)

Technical Details (AC-M515)

Input voltage	AC100-240V 50/60 Hz
Output voltage	DC 6.5V 2A (using for AC adapter) DC 8.4V 1.4A (using for lithium ion battery charger)
Dimensions	71.5(W) x 95.1(D) x 44.5(H) mm
Weight	300g

MEMO

CE Marking (Declaration of Conformity)

We declare under sole responsibility that the Digital Camera to which this declaration relates is in conformity with the below specifications.
This declaration is valid for the area of European Community (EC) only.

Product Type	Digital Camera
Product Name	RD 178
Options	Flash 5400 IHS, AF24-85, AG-MS15

Safety: EN 60950 / 1992 (Safety of information technology equipment, including electrical business equipment)

EMC: EN 65022 (Class B) / 1987
(Limits and method for measurement of radio disturbance characteristics of information technology equipment (ITE))

EN 61000-3-2 (Limits for harmonic current emissions)

EN 61000-3-3 (Limits for voltage fluctuations)

EN 55022-1 / 1992

(Electromagnetic compatibility - Generic immunity standard Part 1: Residential, commercial and light industry)

IEC 601-2 / 1991 (Electrostatic discharge requirement)

IEC 601-3 / 1984 (Radiated electromagnetic field requirement)

IEC 601-4 / 1994 (Electrical fast transient / burst requirement)

EC Directives

Safety: 73 / 23 / EEC and 83 / 68 EEC art. 12

EMC: 89 / 336 / EEC and 83 / 68 EEC art. 5